

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application:

**LISTING OF CLAIMS:**

Claims 1 to 13. (Canceled).

14. (Currently Amended) An atomization system for a fuel, comprising:  
a fuel injector;  
an atomization tube including at least a first section and a second section, the first section having at least one of an outer diameter and a wall thickness that is different than that of the second section;  
an air inlet; and  
at least one metering aperture;  
wherein the atomization tube is formed in one piece having only one axis of symmetry.

15. (Previously Presented) The atomization system as recited in Claim 14, wherein:

the atomization system is for charging a chemical reformer in order to obtain hydrogen.

16. (Previously Presented) The atomization system as recited in Claim 14, wherein:

an inner diameter of the first section is greater than an inner diameter of the second section.

17. (Previously Presented) The atomization system as recited in Claim 14, wherein:

the second section is formed at a downstream side of the first section.

18. (Previously Presented) The atomization system as recited in Claim 17, wherein:

in the second section, multiple bore holes are formed on multiple levels.

19. (Previously Presented) The atomization system as recited in Claim 14, wherein:

the second section is divided into multiple subsections.

20. (Previously Presented) The atomization system as recited in Claim 19, wherein:

the outer diameter of the atomization tube is greater in a first one of the subsections than in a second one of the subsections.

21. (Previously Presented) The atomization system as recited in Claim 20, wherein:

the second of the subsections coincides with a respective level.

22. (Previously Presented) The atomization system as recited in Claim 21, wherein:

a plurality of bore holes are formed in the second of the subsections.

23. (Previously Presented) The atomization system as recited in Claim 18, wherein:

the wall thickness of the first section equals the wall thickness of the second section.

24. (Previously Presented) The atomization system as recited in Claim 23, wherein:

diameters of the bore holes per level increase in a downstream direction.

25. (Currently Amended) The atomization system as recited in Claim 14, wherein:

an outer shaping of the atomization tube is achieved by one of turning on ~~one~~ of a lathe, [[a]] grinding machining, and an erosive machining.

26. (Previously Presented) The atomization system as recited in Claim 18, wherein:

a diameter of the bore holes is approximately 100  $\mu\text{m}$  to 250  $\mu\text{m}$ .

27. (Previously Presented) The atomization system as recited in Claim 26, wherein:

a ratio between a diameter and a length of the bore holes is at least equal to 1.